and

## **LISTING OF CLAIMS**

1. (Currently Amended): A method in a computer system for providing both directory information and dynamically updated contact information for at least one of a plurality of entities in response to a directory search, said method comprising:

receiving a query criteria from a user to perform a directory search, said query criteria comprising information that is included in a directory database;

executing a search of said directory database that comprises static information and does not comprise dynamically updated contact information utilizing said query criteria to produce a first result, said directory database being static information comprising a list of names and addresses of potential recipients;

determining if the first result is a null set;

if the first result is not a null set, invoking a dynamic contact information service utilizing said first result to search an electronic calendaring system to produce a second result containing dynamic contact information about each recipient included in said first result, said dynamic contact information being dynamically updated to indicate a recipient's current contact information and current availability that describe how the recipient can be currently contacted;

if the first result is a null set, determining if the query criteria is valid for submission to the dynamic contact information service:

if the query criteria is valid for submission to the dynamic contact information service, invoking the dynamic contact information service to search the electronic calendar system to produce a second result containing dynamic contact information about each recipient for the query criteria;

coalescing said first and second results to produce a coalesced result; [[and]] sorting the coalesced result based on sort preferences received from the user; filtering the coalesced result based on filter preferences received from the user;

providing displaying said coalesced result after filtering and sorting to the user based on display preferences specified by the user.

2. (Currently Amended): The method according to claim 1, further comprising wherein the displaying said coalesced result after filtering and sorting to the user based on display preferences specified by the user comprises:

executing said search of said directory database utilizing said query criteria to produce said first result which is a null set; and

invoking said dynamic contact information service utilizing said query criteria to produce said-second result

displaying dynamic contact information about each recipient in an order based on each recipient's current availability starting from a recipient who is most available to a recipient who is least available.

3. (Currently Amended): The method according to claim 1, comprising: establishing said directory database including directory records for a first plurality of said plurality of entities, said directory records including directory information for each of said first plurality of said plurality of entities; and

establishing a dynamic contact information service—that provides a dynamiccontent record for a second plurality of said plurality of entities, each said dynamiccontent record being dynamically updated to indicate current contact information for said
each of said second plurality of said plurality of entities wherein the sort preferences
comprise listing recipients who are immediately available first in the coalesced result.

- 4. (Currently Amended): The method according to claim 1, further comprising specifying filtering preferences for filtering said coalesced result to produce a filtered result wherein the display preferences describe directory and dynamic contact information to be displayed for each recipient.
- 5. (Currently Amended): The method according to claim 4, further comprising formatting and displaying said filtered result wherein the display preferences comprise at least one of only dynamic contact information, only directory information, and a combination of directory and dynamic contact information.

- 6. (Currently Amended): The method according to claim 4, further comprising wherein the filtering the coalesced result based on filter preferences received from the user comprises filtering said coalesced result to include within said filtered result only records of a plurality of people whose contact information indicates that said plurality of people are available by a requester the user specified means and within a particular period of time.
- 7. (Currently Amended): The method according to claim 4, further comprising wherein the filtering the coalesced result based on filter preferences received from the user comprises filtering said coalesced result to include within said filtered result only records of a plurality of people whose contact information indicates that said plurality of people are available to receive a telephone call within a particular period of time.
- 8. (Currently Amended): The method according to claim 4, further-comprising wherein the filtering the coalesced result based on filter preferences received from the user comprises filtering said coalesced result to include within said filtered result only records of a plurality of people whose contact information indicates that said plurality of people are available for an in-person meeting within a particular period of time.
- 9. (Currently amended): The method according to claim 4, further comprising wherein the filtering the coalesced result based on filter preferences received from the user comprises filtering said coalesced result to include within said filtered result only records of a plurality of people whose contact information indicates that said plurality of people are available for communication via instant messaging within a particular period of time.
- 10. (Currently Amended): The method according to claim 4, further comprising wherein the filtering the coalesced result based on filter preferences received from the user comprises filtering said coalesced result to include within said filtered result only records of a plurality of people whose contact information indicates that said plurality of people are available for receiving a page within a particular period of time.

- 11. (Currently Amended): The method according to claim 4, further comprising wherein the filtering the coalesced result based on filter preferences received from the user comprises filtering said coalesced result to include within said filtered result only records of a plurality of people whose contact information indicates that said plurality of people are available to check an e-mail account for each of said plurality of people within a particular period of time.
- 12. (Currently Amended): The method according to claim 4, further wherein the filtering the coalesced result based on filter preferences received from the user comprises filtering said coalesced result to include within said filtered result only fields specified by a requestor the user.
- 13. (Currently Amended): The method according to claim 1, further specifying sorting preferences for sorting said coalesced result wherein the query criteria is generated by a routine.
- 14. (Currently Amended): The method according to claim [[13]] 1, further wherein the sorting the coalesced result based on sort preferences received from the user comprises sorting said records coalesced result so that said records are coalesced result is displayed in a particular order.
- 15. (Currently Amended): The method according to claim 1, further including comprising within said coalesced result a telephone number for each of said plurality of people recipient, said telephone number being a telephone number at which said each of said plurality of people recipient can be reached by telephone during a particular period of time.
- 16. (Currently Amended): The method according to claim 1, further comprising including within said coalesced result a physical location for each of said plurality of

people recipient, said physical location being a location where said each of said plurality of people recipient can be found during a particular period of time.

- 17. (Currently Amended): The method according to claim 1, further comprising including within said coalesced result a pager address for each of said plurality of people recipient, said pager address being a pager address at which said each of said plurality of people recipient can be reached by paging during a particular period of time.
- 18. (Currently Amended): The method according to claim 1, further comprising including within said coalesced result an instant message user name for each of said plurality of people recipient, said instant message user name being an instant message user name at which said each of said plurality of people recipient can be reached via an instant message service during a particular period of time.
- 19. (Currently Amended): The method according to claim 1, further comprising including within said coalesced result an e-mail address for each of said plurality of people recipient, said e-mail address being an e-mail address which said each of said plurality of people recipient is expected to check during a particular period of time.
- 20. (Currently Amended): The method according to claim 1, further comprising including within said coalesced result an indication of whether [[said]] one or more of said plurality of people recipients are [[is]] currently utilizing a telephone.
- 21. (Currently Amended): The method according to claim 1, further comprising including within said coalesced result an indication of a best current means for contacting each of said plurality of people recipient.
- 22. (Currently Amended): The method according to claim 1, further comprising including within said coalesced result an indication of an alternate contact person for each of said plurality of people recipient.

- 23. (Currently Amended): The method according to claim 1, further comprising including within said coalesced result an indication of whether [[said]] one or more of said plurality of people recipients are [[is]] available in a particular period of time to be contacted by any means and one or more means for contacting said one or more of said plurality of people recipients.
- 24. (Currently Amended): A computer program product in a computer system for providing both directory information and dynamically updated contact information for at least one of a plurality of entities in response to a directory search, said computer program product comprising:

a computer readable medium having computer readable program code embodied therein, the computer readable medium comprising:

computer readable program code configured to receive a query criteria from a user to perform a directory search, said query criteria comprising information that is included in a directory database;

computer readable program code configured to execute a search of said directory database that comprises static information and does not comprise dynamically updated contact information utilizing said query criteria to produce a first result, said directory database being static information comprising a list of names and addresses of potential recipients;

computer readable program code configured to determine if the first result is a null set;

computer readable program code configured to invoke a dynamic contact information service utilizing said first result to search an electronic calendaring system to produce a second result containing dynamic contact information about each recipient included in said first result if the first result is not a null set, said dynamic contact information being dynamically updated to indicate a recipient's current contact information and current availability that describe how the recipient can be currently contacted;

computer readable program code configured to determine if the query criteria is valid for submission to the dynamic contact information service if the first result is a null set;

computer readable program code configured to invoke the dynamic contact information service utilizing said first result to search the electronic calendaring system to produce a second result containing dynamic contact information about each recipient for the query criteria:

computer readable program code configured to coalesce said first and second results to produce a coalesced result; [[and]]

computer readable program code configured to sort the coalesced result based on sort preferences received from the user:

computer readable program code configured to filter the coalesced result based on filter preferences received from the user; and

computer readable program code configured to provide display said coalesced result after sorting and filtering to the user based on display preferences specified by the user.

25. (Currently Amended): The <u>computer program</u> product according to claim 24, further comprising:

computer readable program code configured to execute said search of said directory database utilizing said query criteria to produce said first result which is a null set; and

computer readable program code configured to invoke said dynamic contact information service utilizing said query criteria to produce said second result wherein the computer readable program code configured to display said coalesced result based on display preferences specified by the user comprises:

computer readable program code configured to display dynamic contact information about each recipient in an order based on each recipient's current availability starting from a recipient who is most available to a recipient who is least available.

26. (Currently Amended): The <u>computer program product according to claim 24</u>, further comprising:

eomputer readable program code configured to establish said directory database comprising directory records for a first-plurality of said plurality of entities, said directory records comprising directory information for each of said first plurality of said plurality of entities; and

eomputer readable program code configured to establish a dynamic contact information service—that provides a dynamic-content record for a second plurality of said plurality of entities, each said dynamic-content record being dynamically updated to indicate current contact information for said each of said-second plurality of said plurality of entities wherein the sort preferences comprise listing recipients who are immediately available first in the coalesced result.

- 27. (Currently Amended): The computer program product according to claim 24, further comprising computer readable program code configured to specify filtering preferences for filtering said coalesced result to produce a filtered result wherein the display preferences describe directory and dynamic contact information to be displayed for each recipient.
- 28. (Currently Amended): The <u>computer program product according to claim [[27]]</u>
  24, further comprising computer readable program code configured to format and display said filtered result wherein the display preferences comprise at least one of only dynamic contact information, only directory information, and a combination of directory and dynamic contact information.
- 29. (Currently Amended): The <u>computer program product according to claim [[27]]</u>
  24, further comprising wherein the computer readable program code configured to filter said coalesced result <u>comprises computer readable program code configured</u> to include within said filtered result only records of a plurality of people whose contact information indicates that said plurality of people are available by a requestor the user specified means and within a particular period of time.

- 30. (Currently Amended): The <u>computer program</u> product according to claim [[27]] 24, <u>further comprising wherein the computer readable program code configured to filter said coalesced result <u>comprises computer readable program code configured to include within said filtered result</u> only records of a plurality of people whose contact information indicates that said plurality of people are available to receive a telephone call within a particular period of time.</u>
- 31. (Currently Amended): The <u>computer program</u> product according to claim [[27]], 24 further comprising wherein the computer readable program code configured to filter said coalesced result <u>comprises computer readable program code configured</u> to include within said filtered result only records of a plurality of people whose contact information indicates that said plurality of people are available for an in-person meeting within a particular period of time.
- 32. (Currently Amended): The <u>computer program</u> product according to claim [[27]] 24, further comprising wherein the computer readable program code configured to filter said coalesced result <u>comprises computer readable program code</u> to include within said filtered result only records of a plurality of people whose contact information indicates that said plurality of people are available for communication via instant messaging within a particular period of time.
- 33. (Currently Amended): The <u>computer program</u> product according to claim [[27]] 24, <u>further-comprising wherein the computer readable program code configured to filter said coalesced result <u>comprises computer readable program code to include within said filtered result</u> only records of a plurality of people whose contact information indicates that said plurality of people are available for receiving a page within a particular period of time.</u>
- 34. (Currently Amended): The <u>computer program</u> product according to claim [[27]] 24, further comprising wherein the computer readable program code configured to filter

said coalesced result <u>comprises compute readable program code</u> to include within said filtered result only records of a plurality of people whose contact information indicates that said plurality of people are available to check an e-mail account for each of said plurality of people within a particular period of time.

- 35. (Currently Amended): The <u>computer program</u> product according to claim [[27]] 24, further comprising wherein the computer readable program code configured to filter said coalesced result <u>comprises compute readable program code</u> to include within said filtered result only fields specified by the user a requestor.
- 36. (Currently Amended): The <u>computer program</u> product according to claim 24, further comprising computer readable program code configured to specify sorting preferences for sorting said coalesced result wherein the query criteria is generated by a routine.
- 37. (Currently Amended): The <u>computer program</u> product according to claim [[36]] 24, further comprising wherein the computer readable program code configured to sort said records <u>coalesced result comprises computer readable program code configured to sort the coalesced result</u> so that said records are <u>coalesced result is</u> displayed in a particular order.
- 38. (Currently Amended): The <u>computer program</u> product according to claim 24, further comprising computer readable program code configured to include within said coalesced result a telephone number for each <u>recipient</u> of said-plurality of people, said telephone number being a telephone number at which said each <u>recipient</u> of said plurality of people can be reached by telephone during a particular period of time.
- 39. (Currently Amended): The <u>computer program</u> product according to claim 24, further comprising computer readable program code configured to include within said coalesced result a physical location for each <u>recipient</u> of said-plurality of people, said

physical location being a location where said each recipient of said plurality of people can be found during a particular period of time.

- 40. (Currently Amended): The <u>computer program</u> product according to claim 24, further comprising-computer readable program code configured to include within said coalesced result a pager address for each <u>recipient</u> of said plurality of people, said pager address being a pager address at which said each <u>recipient</u> of said plurality of people can be reached by paging during a particular period of time.
- 41. (Currently Amended): The <u>computer program</u> product according to claim 24, further computer readable program code configured to include within said coalesced result an instant message user name for each <u>recipient of said plurality of people</u>, said instant message user name being an instant message user name at which said each <u>recipient of said plurality of people</u> can be reached via an instant message service during a particular period of time.
- 42. (Currently Amended): The <u>computer program</u> product according to claim 24, further computer readable program code configured to include within said coalesced result an e-mail address for each <u>recipient of said plurality of people</u>, said e-mail address being an e-mail address which said each <u>recipient of said plurality of people</u> is expected to check during a particular period of time.
- 43. (Currently Amended): The <u>computer program</u> product according to claim 24, further comprising-computer readable program code configured to include within said coalesced result an indication of whether [[said]] one or more <u>recipients</u> of said plurality of people [[is]] <u>are</u> currently utilizing a telephone.
- 44. (Currently Amended): The <u>computer program</u> product according to claim 24, further comprising computer readable program code configured to include within said coalesced result an indication of a best current means for contacting each of said plurality of people recipient.

- 45. (Currently Amended): The <u>computer program</u> product according to claim 24, further comprising-computer readable program code configured to include within said coalesced result an indication of an alternate contact person for each <u>recipient of said plurality of people</u>.
- 46. (Currently Amended): The <u>computer program</u> product according to claim 24, further comprising-computer readable program code configured to include within said coalesced result an indication of whether [[said]] one or more of said plurality of people recipients are [[is]] available in a particular period of time to be contacted by any means and one or more means for contacting said one or more recipients of said plurality of people.
- 47. (Currently Amended): A computer system for providing both directory information and dynamically updated contact information for at least one of a plurality of entities in response to a directory search, comprising:
  - a memory;
  - a processor connected to access said memory:
- a directory database stored in said memory, said-directory database comprising a list of names and addresses of potential recipients, said directory database comprising static information and does not comprise dynamically updated contact information; said static information comprising a list of name and addresses of potential recipients;

program instructions stored in said memory and executed by said processor, said program instructions comprising

instructions for receiving a query criteria from a user to perform a directory search, said query criteria comprising information that is included in said directory database

instructions for executing a search of said directory database utilizing said query criteria to produce a first result;

instructions for determining if the first result is a null set;

instructions for invoking a dynamic contact information service utilizing said first result to search an electronic calendaring system to produce a second result containing dynamic contact information about each recipient included in said first result if the first result is not a null set, said dynamic contact information being dynamically updated to indicate a recipient's current contact information and current availability to describe how the recipient can be currently contacted;

instructions for determining if the query criteria is valid for submission to the dynamic contact information service if the first result is a null set;

instructions for invoking the dynamic contact information service to search the electronic calendar system to produce a second result containing dynamic contact information about each recipient for the query criteria if the query criteria is valid for submission to the dynamic contact information service;

instructions for coalescing said first and second results to produce a coalesced result; [[and]]

instructions for sorting the coalesced result based on sort preferences received from the user;

instructions for filtering the coalesced result based on filter preferences received from the user; and

instructions for <u>providing displaying</u> said coalesced result after <u>instructions for sorting and filtering to the user based on display preferences</u> <u>specified by the user.</u>

48. (Currently Amended): The <u>computer</u> system according to claim 47, further comprising, when said first result is a null set, instructions for invoking said dynamic contact information service utilizing said query criteria to produce said second result wherein the instructions for displaying said coalesced result to the user comprise:

instructions for displaying dynamic contact information about each recipient in an order based on each recipient's current availability starting from a recipient who is most available to a recipient who is least available.

49. (Currently Amended): The <u>computer</u> system according to claim 47, <del>further</del> <del>comprising:</del>

said directory database comprising directory records for a first plurality of said plurality of entities, said directory records comprising directory information for each of said first plurality of said plurality of entities; and

a dynamic contact information service that provides a dynamic content record for a second plurality of said plurality of entities, each said dynamic content record being dynamically updated to indicate current contact information for said each of said second plurality of said plurality of entities wherein the sort preferences comprise listing recipients who are immediately available first in the coalesced result.

- 50. (Currently Amended): The <u>computer</u> system according to claim 47, further comprising instructions for receiving specified filtering preferences for filtering said coalesced result to produce a filtered result wherein the display preferences describe directory and dynamic contact information to be displayed for each recipient.
- 51. (Currently Amended): The <u>computer</u> system according to claim [[50]] <u>47</u>, further comprising instructions for formatting and displaying said filtered result wherein the <u>display preferences comprise at least one of only dynamic contact information, only directory information, and a combination of directory and dynamic contact information.</u>
- 52. (Currently Amended): The <u>computer</u> system according to claim [[50]] <u>47</u>, further <u>comprising wherein the</u> instructions for filtering said coalesced result <u>comprise</u> instructions for including to include within said filtered result only records of a plurality of people whose contact information indicates that said plurality of people are available by a requestor the user specified means and within a particular period of time.
- 53. (Currently Amended): The <u>computer</u> system according to claim [[50]] <u>47</u>, further <u>comprising wherein the</u> instructions for filtering said coalesced result <u>comprise</u> instructions for including to include within said filtered result only records of a plurality

of people whose contact information indicates that said plurality of people are available to receive a telephone call within a particular period of time.

- 54. (Currently Amended): The <u>computer</u> system according to claim [[50]] <u>47</u>, further comprising wherein the instructions for filtering said coalesced result <u>comprise</u> instructions for including to include within said filtered result only records of a plurality of people whose contact information indicates that said plurality of people are available for an in-person meeting within a particular period of time.
- 55. (Currently Amended): The <u>computer</u> system according to claim [[50]] <u>47</u>, <u>further</u> emprising <u>wherein the</u> instructions for filtering said coalesced result <u>comprise</u> instructions for including to include within said filtered result only records of a plurality of people whose contact information indicates that said plurality of people are available for communication via instant messaging within a particular period of time.
- 56. (Currently Amended): The <u>computer</u> system according to claim [[50]] <u>47</u>, further comprising <u>wherein the</u> instructions for filtering said coalesced result <u>comprise</u> instructions for including to include within said filtered result only records of a plurality of people whose contact information indicates that said plurality of people are available for receiving a page within a particular period of time.
- 57. (Currently Amended): The <u>computer</u> system according to claim [[50]] <u>47</u>, further <u>comprising</u> wherein the instructions for filtering said coalesced result <u>comprise</u> instructions for including to include within said filtered result only records of a plurality of people whose contact information indicates that said plurality of people are available to check an e-mail account for each of said plurality of people within a particular period of time.
- 58. (Currently Amended): The <u>computer</u> system according to claim 50, further <u>comprising wherein the instructions</u> for filtering said coalesced result <u>comprise</u>

instructions to include within said filtered result only fields specified by the user a requestor.

- 59. (Currently Amended): The <u>computer</u> system according to claim 47, further comprising instructions for receiving specified sorting preferences for sorting said coalesced result wherein the query criteria is generated by a routine.
- 60. (Currently Amended): The <u>computer</u> system according to claim [[59]] <u>47</u>, further comprising wherein the instructions for sorting said records coalesced result comprise instructions for sorting the coalesced result so that said records are coalesced result is displayed in a particular order.
- 61. (Currently Amended): The <u>computer</u> system according to claim 47, further comprising said coalesced result comprising a telephone number for each of said plurality of people <u>recipient</u>, said telephone number being a telephone number at which said each of said plurality of people <u>recipient</u> can be reached by telephone during a particular period of time.
- 62. (Currently Amended): The <u>computer</u> system according to claim 47, further comprising said coalesced result comprising a physical location for each <u>recipient</u> of said plurality of people, said physical location being a location where said each of said plurality of people recipient can be found during a particular period of time.
- 63. (Currently Amended): The <u>computer</u> system according to claim 47, further comprising said coalesced result comprising a pager address for each <u>recipient</u> of said <u>plurality of people</u>, said pager address being a pager address at which said each <u>recipient</u> of said plurality of people can be reached by paging during a particular period of time.
- 64. (Currently Amended): The <u>computer</u> system according to claim 47, further comprising said coalesced result comprising an instant message user name for each <u>recipient</u> of said plurality of people, said instant message user name being an instant

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message user name at which said each recipient of said plurality of people can be reached via an instant message service during a particular period of time.

- 65. (Currently Amended): The <u>computer</u> system according to claim 47, further comprising said coalesced result comprising an e-mail address for each <u>recipient</u> of said plurality of people, said e-mail address being an e-mail address which said each <u>recipient</u> of said plurality of people is expected to check during a particular period of time.
- 66. (Currently Amended): The <u>computer system according to claim 47</u>, further comprising said coalesced result comprising an indication of whether [[said]] one or more of said plurality of people recipients are [[is]] currently utilizing a telephone.
- 67. (Currently Amended): The <u>computer</u> system according to claim 47, further comprising said coalesced result comprising an indication of a best current means for contacting each <u>recipient</u> of said plurality of people.
- 68. (Currently Amended): The <u>computer</u> system according to claim 47, further comprising said coalesced result comprising an indication of an alternate contact person for each <u>recipient</u> of said plurality of people.
- 69. (Currently Amended): The <u>computer</u> system according to claim 47, further comprising said coalesced result comprising an indication of whether [[said]] one or more <u>of said plurality of people recipients are</u> [[is]] available in a particular period of time to be contacted by any means and one or more means for contacting said one or more <u>of said plurality of people</u> recipients.